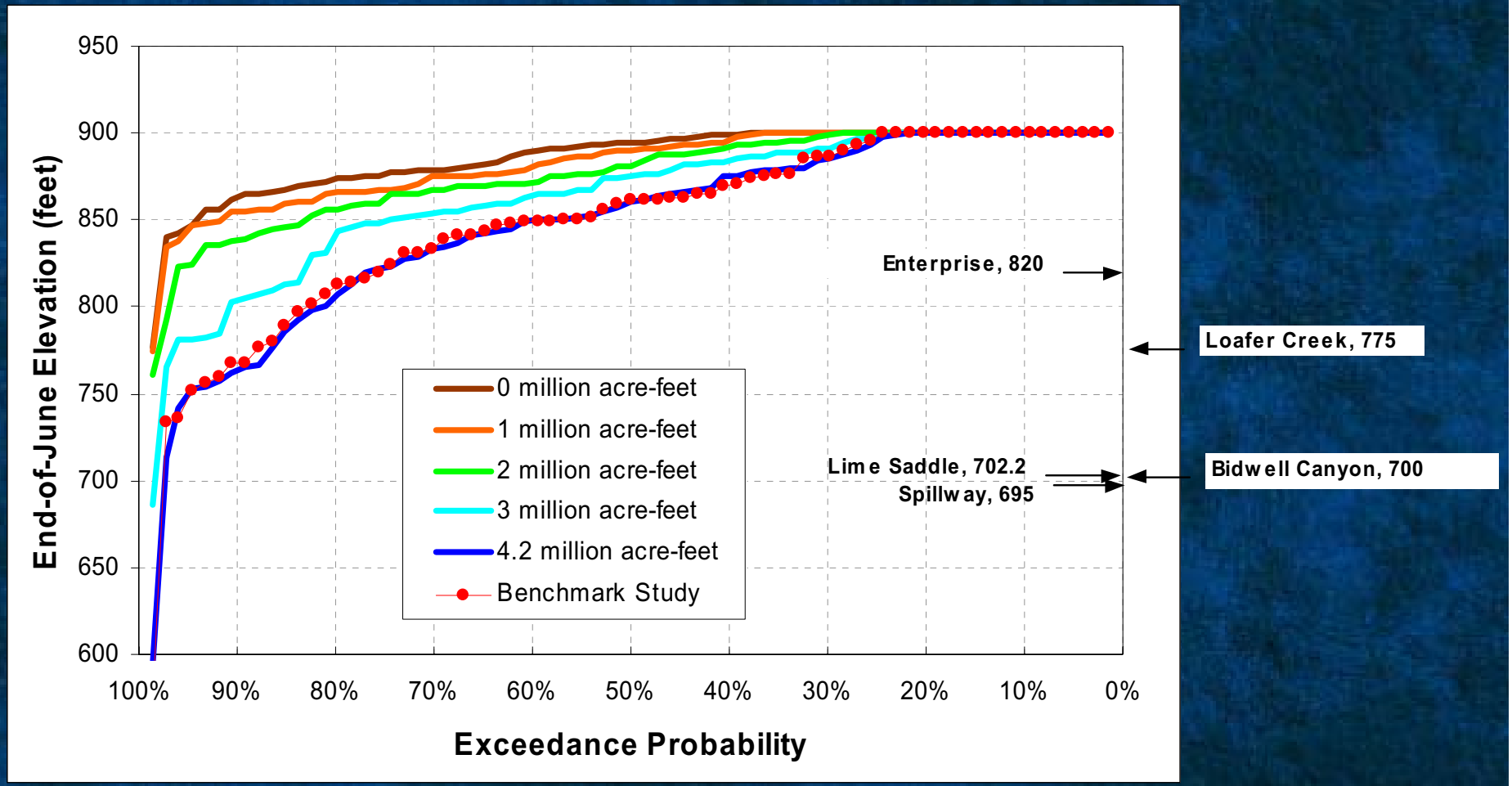
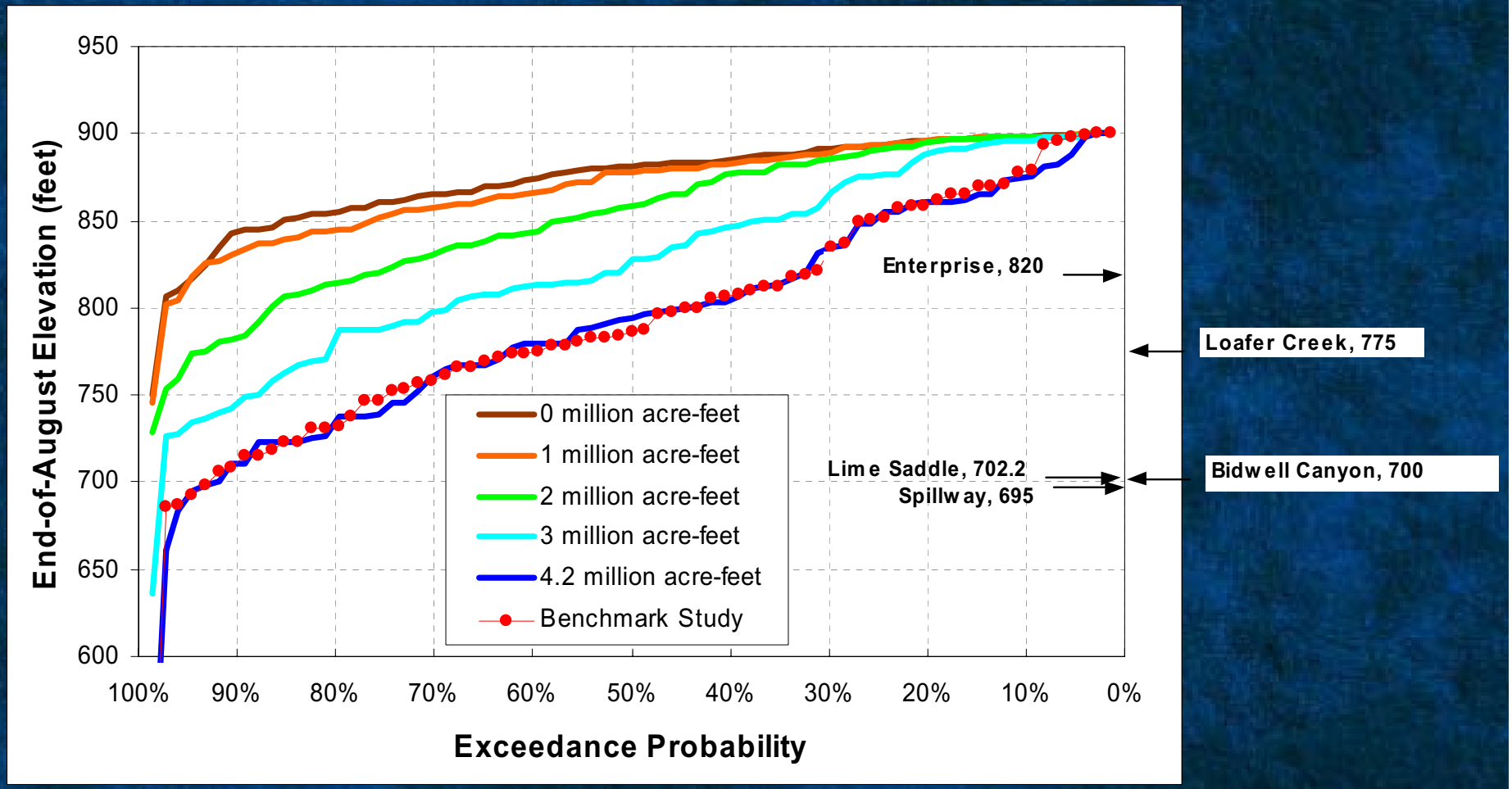
Sensitivity Analysis
– Scenario 13: Levels of SWP Demand



Sensitivity Analysis
– Scenario 13: Levels of SWP Demand



Now, Let's Take a Break

Sensitivity Analysis
– Scenarios Presented Today

- Scenario 1 – Eliminating Pump-Back Operation

  Presenter: Curtis Creel

  Chief, Project Operations Planning Branch, SWP Operations Control Office

- Scenario 13 – Levels of SWP Demand

  Presenter: Art Hinojosa, Jr.

  Chief, Operations Compliance & Studies Section, SWP Operations Control Office

- Scenario 17 – Downstream Extent of Temperature Control

  Presenter: Curtis Creel

  Chief, Project Operations Planning Branch, SWP Operations Control Office

Sensitivity Analysis

– Scenario 17: Downstream Extent of Temperature Control

- Objective

  Investigate the downstream limits of temperature control, by operation of the Oroville Facilities, in the high-flow section of Feather River from Thermalito Afterbay outlet to mouth

- Model used: WQRRS

  Modified to include the high-flow section of the Feather River only

- Status: Completed

Sensitivity Analysis

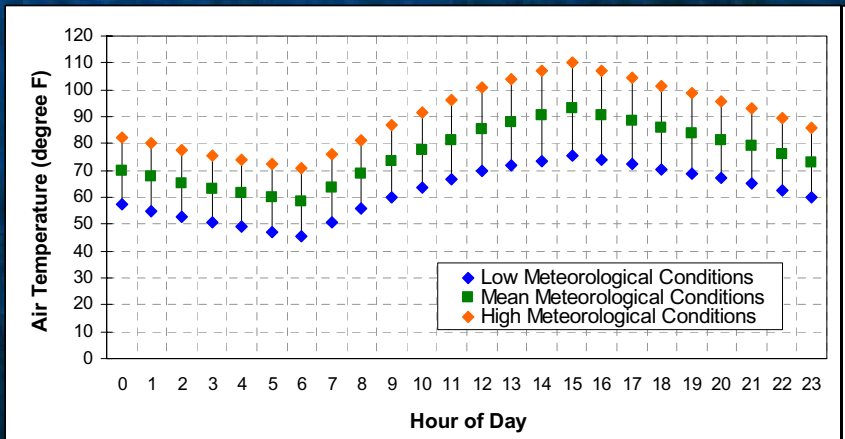
– Scenario 17: Downstream Extent of Temperature Control

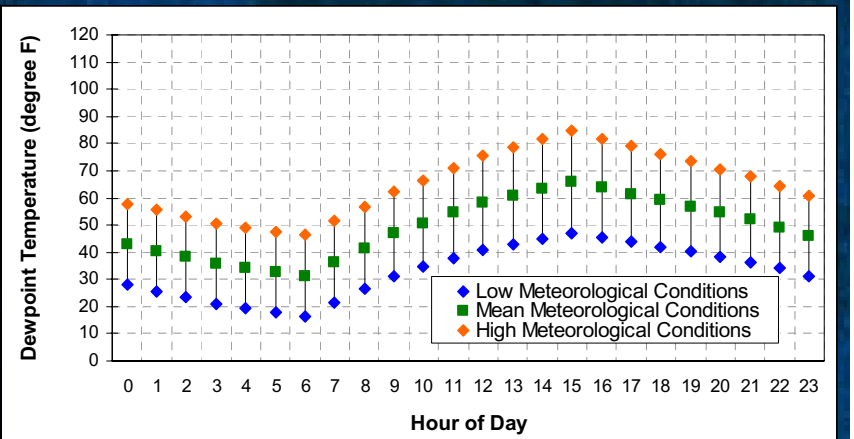
- Assumptions
  - The diurnal variations of shortwave radiation, longwave radiation and dew point temperatures were developed based on July through September of 14-year records.
  - High, and low meteorological conditions represent the upper and lower bounds of a range with about 95 percent of occurrence.

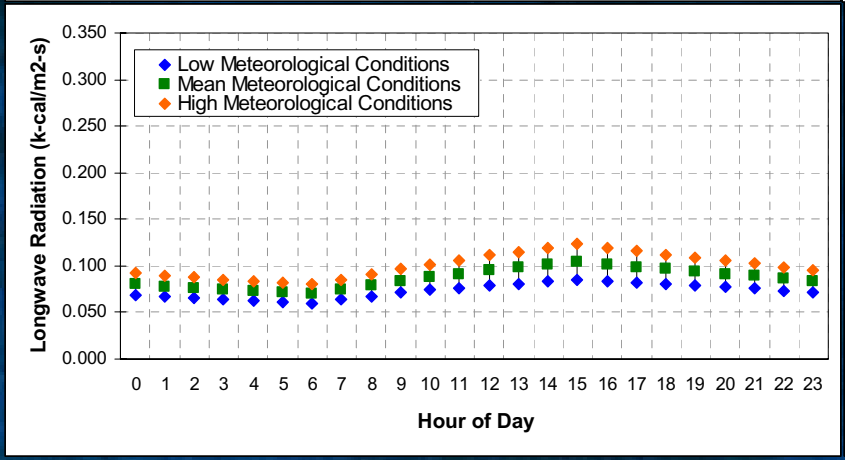
Sensitivity Analysis

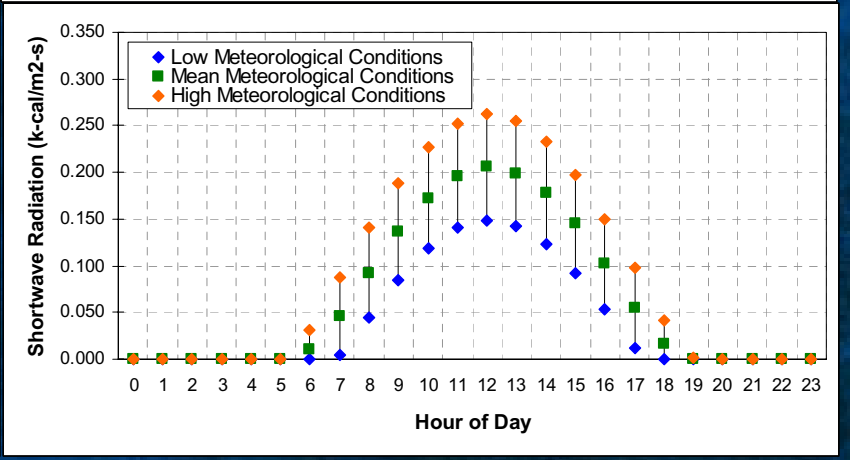
– Scenario 17: Downstream Extent of Temperature Control

- Assumptions (cont'd)









Sensitivity Analysis

– Scenario 17: Downstream Extent of Temperature Control

- Assumptions (cont'd)
  - Headwater flows and temperatures were selected to bracket typical historical conditions.
    - Flow: 600, 1,000, and 4,200 cfs
    - Temperature: 60, 65, 70, and 75 degrees F
  - Tributary flows were derived from historic data. Their temperatures are based on correlations with assumed ambient air temperatures.

Operations of Oroville Facilities to facilitate assumed flows and temperature were not evaluated